

Attorney Docket No.  
1356-SW

2

Patent  
U. S. Serial No. 09/671,960

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application. All claims currently being amended are shown with deleted text struckthrough or double bracketed and new text underlined. Additionally, the status of each claims is indicated in parenthetical expression following the claim number.

Claims 1-9 remain.

Claims 1 and 8 are being amended.

Claims 10-14 are being added.

### WHAT IS CLAIMED IS:

1. (Currently Amended) A medium access control (MAC) layer for a node of a wireless local area network, comprising a hardware layer and a software layer, the hardware layer being configured to perform time-critical tasks and the software layer being configured to perform non-time critical tasks, wherein the software layer comprises multiple modules including one or more of a host communication agent, a bridging layer, a network management support module, a SBM-to-TAME conversion module, and a rate estimation module.

2. (Cancelled)

3. (Original) The MAC layer of claim 1 wherein the software layer acts as the source of and the destination of MAC Service Data Units.

4. (Original) The MAC layer of claim 1 configured for use in an embedded application.

5. (Original) The MAC layer of claim 1 configured for use in a stand-alone application.

Attorney Docket No.  
1356-SW

3

Patent  
U. S. Serial No. 09/671,960

6. (Original) The MAC layer of claim 1 configured for use in a host-based application.
7. (Original) The MAC layer of claim 6 wherein all communication layers above the MAC layer are configured to run on a host.
8. (Currently Amended) [[The MAC layer of claim 1]] A medium access control (MAC) layer for a node of a wireless local area network, comprising a hardware layer and a software layer, the hardware layer being configured to perform time-critical tasks and the software layer being configured to perform non-time critical tasks, wherein the software layer is configured as a hierarchical structure in which functional unit blocks for associated elements of the hardware layer communicate with an application layer through respective device drivers and managers.
9. (Original) The MAC layer of claim 8 wherein the device drivers and managers communicate through a device manager layer.
10. (New) The MAC layer of claim 8 wherein the software layer acts as the source of and the destination of MAC Service Data Units.
11. (New) The MAC layer of claim 8 configured for use in an embedded application.
12. (New) The MAC layer of claim 8 configured for use in a stand-alone application.
13. (New) The MAC layer of claim 8 configured for use in a host-based application.
14. (New) The MAC layer of claim 8 wherein all communication layers above the MAC layer are configured to run on a host.